



Oregon Tilth, Inc.

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To: The National Organic Standards Board

From: Oregon Tilth, Inc.

Re: NOSB Handling Committee Recommendation for the Retention of Flavors on § 205.605(a)

Oregon Tilth is responding to the NOSB Handling Committee February 1st, 2006 draft recommendation to renew listing of flavors and colors on § 205.605(a). While the committee recommendation refers to both flavors and colors, significant technical differences between the two have led us to view these substances separately. Oregon Tilth recognizes the comprehensive, illustrative and perceptive comments regarding renewal of colors prepared by the Organic Materials Review Institute (OMRI). Oregon Tilth supports OMRI's comments discouraging the use of synthetic colors and the retention of agricultural colors under § 205.605(a) and encourages the NOSB to address colors separately from flavors when considering their renewal.

Flavors

Oregon Tilth does not support retention of the *current* listing of flavors, but rather supports transition to a reasonably defined inclusion of *non-agricultural* flavors as per the § 205.605 heading. When deliberating the renewal of flavors, the following considerations must be taken into account and clarification provided accordingly:

1. The *current* listing is too broad of a category, allowing numerous non-organic agricultural products into consumer products labeled 'organic.'
2. Many natural flavors are 'agricultural' by current definition. These would more appropriately be listed under § 205.606 if not commercially available as organic.
3. A significant number of flavors are now commercially available in organic form.
4. The listing of agricultural flavors under § 205.605 does not support the production of organic flavors.

'Natural Flavors' as defined by the FDA in 21 CFR Part 101 is an extremely broad definition ranging from protein hydrolysate to botanical extracts and distillates, all of which may be derived from a spice, fruit, vegetable, edible yeast, herb, bark, bud, root, leaf or similar plant material, meat, seafood, poultry, eggs, dairy products, or fermentation products thereof. Additionally, the natural flavors most commonly used in organic food and beverage products are actually complex mixtures of various substances, the majority of which are agricultural carriers, combined with small amounts of flavoring compounds and stabilizers, both of which may be either agricultural or nonagricultural.

In the case of a botanical extract, such as one derived from peppermint (peppermint and ethyl alcohol), the extract is generally accepted as agricultural. It does not meet the Rule definition of ‘non-agricultural’ and it is readily available in organic form. However, because peppermint extract meets the broad FDA definition of a natural flavor and ‘flavors’ are listed under § 205.605, the peppermint extract is regarded as non-agricultural and the non-organic form is consequently allowed in organic products. The manufacturer of the organic product is neither required to source or use organic peppermint extract.

In the case of an aroma chemical such as natural cis-3-Hexenol, the substance is more commonly recognized as non-agricultural and fits the Rule definition of ‘non-agricultural’. However, the starting material used to create the natural form is mint terpenes, a byproduct of mint essential oil manufacturing. In accordance with the annotation placed on flavors, the mint terpenes are then purified via distillation. While natural cis-3-Hexenol is more easily classified as non-agricultural than is peppermint extract, the agricultural origin and mechanical/physical processing steps allow for the organic production of this substance, which would in turn supports its classification as an ‘agricultural product’.

Please note that the pending NOSB Recommendation relative to “agricultural” and “non-agricultural” substances provides criteria for determining the non-agricultural status of a substance. Given the criteria provided in the proposed Decision Tree, as well as the proposed Rule change for the definition of non-agricultural, most flavors would be classified as “agricultural”. The NOSB should carefully address flavors in the process of finalizing recommendations relative to determining the agricultural and non-agricultural status of substances.

The majority of the natural flavors used in organic food products are actually mixtures of flavoring compounds, such as natural cis-3-Hexenol, combined with other agricultural and non-agricultural ingredients. The only company that would be adding aroma chemicals directly to a product would be manufacturers of flavors and fragrances, not manufacturers of finished organic food and beverage products. A typical natural flavor formula used in an organic food or beverage product might appear as follows:

Natural Strawberry Flavor

Component	Percentage
Ethyl Alcohol	30.00
Aroma Chemicals	2.00
Water	25.50
Strawberry Juice Concentrate	10.00
Hibiscus Extract	1.00
Citric Acid	1.50
High Fructose Corn Syrup	30.00

The actual percentage of non-agricultural ingredients is less than 5%, and as presented earlier, the non-agricultural status of the aroma chemical is debatable. The agricultural ingredients listed in the above formula are currently available in organic form, and the non-agricultural ingredients are

included on the National List. Therefore, the flavor product can be produced organically and in fact many similar products are. Organic flavors, such as the strawberry flavor presented above, have been on the market for many years and several companies are currently selling organic natural flavors for use in a multitude of organic consumer products. On an ongoing basis, these organic flavor companies create new products that mimic existing non-organic natural flavors and compete in both quality and price with their non-organic counterparts.

Given the agricultural status of many natural flavors and the significant number of organic flavors currently in the marketplace, the broad category listing of flavors as non-agricultural under § 205.605 creates an unnecessary discrepancy within the Rule. The current listing allows broad use of non-organic agricultural ingredients when formulated or categorized as a ‘flavor’ while all other (and sometimes the same) minor agricultural ingredients are subject to listing at § 205.606. As a consequence, while one company is required to spend considerable money and resources to secure a consistent supply of organic guar gum or organic lecithin, another ‘organic’ product manufacturer may use non-organic peppermint oil as a ‘flavor’ regardless of organic availability. The allowance of non-organic botanical extracts when they’re readily available in organic form does not support the production of organic ingredients and therefore does not support the progressive NOSB Final Recommendation of October 1995 nor the ‘Sunset’ clause embodied within OFPA.

Recommendations Oregon Tilth urges the NOSB to address colors separately from flavors when considering their renewal.

Oregon Tilth supports the transition to a listing of *non-agricultural* flavors only. A thorough investigation into flavor composition and manufacturing practices should inform the determination and long-term retention of solely *non-agricultural* non-synthetic flavors. Organic status should be required for agricultural flavors unless petitioned onto § 205.606.

During any interim that a broad category of flavors remains on § 205.605, guidance distinguishing agricultural flavors from non-agricultural should be operative to aid in evaluation of § 205.606 flavor petitions and create consistent verification among accredited certifiers.